The listing of claims presented below replaces all prior versions and listing of claims in the application.

Listing of claims:

1. (Currently Amended) A process for preparation of ceftiofur of formula (I) of <u>a high</u> purity greater than 97% and substantially free of impurities comprising,

comprising the steps of: reacting [2-(2-aminothiazol-4-yl)]-2-syn-methoxyimino acetic acid-2-benzothiazolyl thioester of formula (II),

with 7-amino-3-(2-furanylcarbonylthiomethyl)-3-cephem-4-carboxylic acid of formula (III)

in the presence of a mixture of an water-immiscible inert organic solvent and water and in the presence of a organic base and isolating ceftiofur of formula (I) of a purity greater than 97% substantially free of impurities by,

- a) adding water to the reaction mixture and selectively partitioning the impurities in the organic phase and ceftiofur(I) in the form of a salt with the base in the aqueous phase,
- b) acidifying the aqueous phase containing ceftiofur (I) in the form of a salt with the base in the presence of a mixture containing a water-miscible and a water-immiscible organic solvent and in the presence of a saturated aqueous solution of an alkali or alkaline earth containing salt, to partition ceftiofur (I) in the organic phase, and
- c) isolating ceftiofur (I) of <u>a high</u> purity greater than 97% and substantially free of impurities by evaporation of the organic solvent or precipitation by addition of a co-solvent an antisolvent.
- 2. (Currently Amended) A <u>The</u> process according to claim 1, wherein the water-immiscible inert organic solvent comprises a chlorinated solvent.

- 3. (Currently Amended) A <u>The</u> process according to claim 2, wherein said chlorinated solvent is selected from dichloromethane, 1,2-dichloroethane, and chloroform.
- 4. (Currently Amended) A <u>The</u> process according to claim 1, wherein the organic base is selected from triethyl amine, N-methyl morpholine, tert-butyl amine, dicyclohexyl amine, tri-n-butylamine, N-methyl pyrrolidinone and 2,3-dimethylamino pyridine.
- 5. (Currently Amended) A The A process according to claim 3 4, wherein the base is employed in molar proportion of 1.0 to 3.0 moles per mole of the compound of formula (III).
- 6. (Currently Amended) A The process according to claim 1, wherein the compound of formula (II) is employed in molar proportion of 1.0 to 2.0 moles per mole of the compound of formula (III).
- 7. (Currently Amended) A The process according to claim 1, wherein the ratio of the water-immiscible inert organic solvent and to water is between 90: 10 and 98: 2.0.
- 8. (Currently Amended) A <u>The</u> process according to claim 7, wherein the ratio of the water-immiscible inert organic solvent and to water is preferably between 95: 5.0 and 97.5: 2.5.
- 9. (Currently Amended) A The process according to claim 1, wherein the temperature at which the reaction is carried out is between 0 and 30°C.
- 10. (Currently Amended) A The process according to claim 1, wherein the water-immiscible solvent is a chlorinated solvent or C_{1-6} alkyl acetate.
- 11. (Currently Amended) A <u>The</u> process according to claim 10, wherein the chlorinated inert organic solvent is selected from dichloromethane, dichloroethane and chloroform and the

C₁₋₆ alkyl acetate is selected from ethyl acetate, butyl acetate, n-propyl acetate, isopropyl acetate and tert-butyl acetate.

- 12. (Currently Amended) A <u>The</u> process according to claim 1, wherein the acid employed for adjusting the pH is a mineral acid selected from orthophosphoric acid, hydrochloric acid and [[,]] sulphuric acid.
- 13. (Currently Amended) A The process according to claim 1, wherein the pH of the reaction in step (b) is 3.0 ± 0.1 .
- 14. (Currently Amended) A The process according to claim 1, wherein the water-miscible organic solvent is selected from a ketonic solvent and a nitrile.
- 15.. (Currently Amended) A <u>The</u> process according to claim 1, wherein the water-miscible organic solvent is a nitrile selected from acetonitrile, propionitrile and butyronitrile.
- 16. (Currently Amended) A <u>The</u> process according to claim 1, wherein the water immiscible solvent is selected from ehlorinated solvents like dichloromethane, dichloroethane, chloroform, or C_{1-6} alkyl acetates like ethyl acetate, n-butyl acetate[[,]] and isopropyl acetate.
- 17. (Currently Amended) A <u>The</u> process according to claim 1, wherein the alkali or an alkaline earth metal containing salt is selected from sodium chloride, potassium chloride, sodium sulphate, potassium sulphate, <u>and</u> calcium chloride.
- 18. (Currently Amended) A <u>The</u> process according to claim 1, wherein the anti-solvent co-solvent is selected from an aromatic hydrocarbon and an aliphatic hydrocarbon.
- 19. (Currently Amended) A <u>The</u> process according to claim 18, wherein the aromatic hydrocarbon is selected from toluene and[[,]] xylene, and the aliphatic hydrocarbon is selected from cyclohexane, n-hexane and heptane.

20. (Withdrawn / Currently Amended) A process for making the ceftiofur sodium of formula (XI) of high purity, stability and substantially free from impurities, comprising,

reacting comprising the steps of: reacting ceftiofur of formula [[(]](I),

with sodium-2-ethyl hexanoate in an aqueous mixture of water miscible organic solvents and in the presence of an organic base.